PROBLEM/FAILURE REPORTING PROCEDURES

INSTRUCTION SHEET FOR PROBLEM/FAILURE REPORT

Block (1) Check appropriate block for element being tested.
P/FR #: Leave blank. $# generated by computer when input into system. Contractor Report #: All off site contractor initiators fill in with the contractor unique tracking #.

Block (2) All initiators, use project approved acronym or project name.

Block (3) All initiators, provide the project approved acronym or complete name of the spacecraft or observatory on which problem occurred.

Block (4) Enter the elapsed time to the point where problem occurred to the tenth of hour.

Block (5) If testing in cycles, enter the number of cycles elapsed to the point where the problem/failure occurred.

Block (6) All initiators, enter system or experiment name. Definition: "System" - The next functional subdivision of a spacecraft generally composed of two or more components designed to perform an operation. Example: Electrical Communication system, etc. "Experiment" - The next functional subdivision of a spacecraft, generally a combination of two or more components, including both the sensor and associated electronics designed for acquisition of data for space research.

Block (7) For software testing - enter the configuration nomenclature for the item being tested.

Block (8) Enter date & time of problem/failure. Example - June 8, 1967 at 3 p.m. - Year 67 Month 06 Day 08 Time 1500.

Block (9) Enter date the problem/failure report is originated. Example - June 9, 1967 - Year 67 Month 09 Day 08.

Block (10) Enter the complete: last and first name, telephone number and organization (GSFC Code or Company) of the P/FR initiator.

Block (11) For software enter the ID# of Run Test.

Block (12) For software check the appropriate item, enter the appropriate dump tape number and enter the correct criticality code C U RCritical, Urgent, Routine.

Block (13) Check the appropriate item indicating the type of test being conducted when the problem/failure occurred. If other is checked, describe in Block (21).

Block (14) Check item that defines the actual environment the unit was being subjected to when the problem/failure occurred. Caution for example, do not check vibration if unit failed during a function test prior to the actual application of the vibration environment, check ambient. If the environment in which the unit failed is not listed or the description listed does not give sufficient detail, give this information in Block (21).

Block (15) Check item that defines the hardware level at the time of problem/failure. For example: If a power supply subassembly fails during communications systems test, check spacecraft sub-system.

Block (16) Check item that defines the software level at time of problem/failure. If other is checked, describe in Block (21).

Blocks (17-20) Initiators provide cage code if known of leave blank.

Block (17) Enter component name. Definition: "Component" - The next functional subdivision of a system which is generally a self-contained combination of assemblies performing a function necessary to the systems operations. Example: Power, power supply, transmitter, gyro package, etc. Enter component identification no., serial no., the manufacturer's name, and the manufacturer's cage code.

Block (18) Enter assembly name. Definition: "Assembly" - The next functional subdivision of a component which consists of parts or subassemblies which perform functions necessary to the operation of the component as a whole. Example: Regulator assembly, power amplifier assembly, etc. Enter the assembly identification no., serial no., manufacturer's name, manufacturer's cage code.

Block (19) Enter subassembly name. Definition: "Subassembly" - An assembly within a larger assembly. Example: Wired printed circuit board modules, etc. Enter subassembly identification no., serial no., manufacturer's name, manufacturer's cage code.

Block (20) Enter part name. Definition: "Part" - An element of a component, assembly or subassembly which is not normally subject to further subdivision or disassembly without destruction of designed use. Example: Resistors, transistors, diodes, etc. Enter manufacturer's part number, the manufacturer's name, date code, and manufacturer's cage code.

Block (21) Enter all details of the problem/failure such as inputs, outputs, tolerances, symptoms, abnormal conditions, testing phase, detail of environment and prior environment. Use additional sheets if necessary.

Block (22) Enter reference information.

Block (23) Enter detailed, concise narrative defining the actual direct cause of the problem/failure. Use additional sheets if necessary.

Block (24) Enter detailed, but concise, narrative defining the corrective action taken. The corrective action shall be sufficient to preclude the problem/failure from occurring again. Use additional sheets if necessary.

Block (25) List other units affected by the corrective action. Enter N/A if not applicable.

Block (26) Check appropriate item and fill in requested information if appropriate.

Block (27) Check appropriate item(s) and fill in requested information.

Block (28) Check appropriate item and detail which tests if any need to be re-run. Enter date retest completed if required.

Block (29) Check appropriate item and provide supporting rationale, if any.

Block (30) GSFC hardware/software contractors (program manager/FRB chairman) fill out this block at completion of all actions.

Blocks (31-36) are for GSFC Project Failure Review Board use only. Refer to FAP P-303-849.

Block (31) Check if failure involves a safety related item.

Block (32) Choose appropriate: 1 - None or negligible; 2 - Moderate or significant; 3 - Major or catastrophic.

Block (33) Choose appropriate: 1 - Known cause/certainty in corrective action, no possibility of recurrence; 2 - Unknown cause/certainty in corrective action, no possibility of recurrence; 3 - Known cause/uncertainty in corrective action, some possibility of recurrence; or 4 - Unknown cause/certainty in corrective action, some possibility of recurrence.

Block (34) Check Yes or No, based on conditions of blocks #32, #33. Refer to FAP P-303-849.

Block (35) GSFC project manager approval.

Block (36) GSFC project FAM approval to close.

Figure 2. GSFC PFR Form 4-2 (cont.)